National Oceanic and Atmospheric Administration

Sustain Healthy Coasts

-- A NOAA Strategic Goal --

Many coastal areas and resources are experiencing environmental decline. The reasons for coastal environmental decline are numerous and complex, but population growth and the cumulative effects of human activities affecting coastal areas are significant factors.

Over 50% of the U.S. population lives on only 10% of the land area that is coastal, and these populations are growing at a faster rate than those inland.

This increased population translates into a loss of coastal habitats such as wetlands and riparian areas. These habitats are essential to over 75% of the total commercial landings and 80-90% of the recreational catch of fish and shellfish of the continental U.S. fish species dependent on coastal habitats have been reduced to historically low levels by over-fishing, habitat loss, and habitat deterioration from pollution and alterations in freshwater flows. These biological problems threaten significant sectors of the U.S. economy. For example, commercial fisheries produce $3 billion in revenue to fishermen and generate $38 billion in economic activity nationally. Seventeen million Americans who enjoy recreational fishing, generate an estimated $18 billion in economic activity.

Coastal Habitats

The water quality of our coastal areas is in decline.

Work towards Clean Coastal Waters

There have been disruptive changes in the biological composition and structure of coastal ecosystems that raise serious concerns. These changes in biological diversity can be an indicator of stress on coastal ecosystems. In other coastal areas, good environmental conditions are threatened by point and nonpoint sources of pollution. Thirty-five percent of estuarine waters assessed in the U.S. are impaired and 10% are threatened. Runoff from diffuse sources like city streets, farms, suburban lawns, and forest clear cuts contribute significantly to the problem. Coastal recreation and tourism are a significant sector of the U.S. economy and depend on good environmental conditions such as clean coastal water for swimming and fishing. In Monroe County, Florida alone, which includes the Florida Keys, saltwater fishing and tourism generate nearly half a billion dollars annually. In 1994, foreign visitors to the U.S. spent $78 billion largely in coastal locations.

Intensive residential and commercial development of coastal areas, particularly fragile, storm-prone areas such as barrier islands, puts life and property at risk and creates substantial financial liabilities.

Build Well-Planned Coastal Communities

Coastal storms such as hurricanes annually cause billions of dollars of damage. For example, damages from Hurricane Hugo in South Carolina in September 1989 totalled $10 billion. Some damages from coastal storms could be avoided by making better decisions about placement of development in coastal areas. Older urban waterfronts are in decline in many cities, and thoughtful planning and the revitalization of these areas is essential for their future economic viability.

Many of the links in this Theme Page are to NOAA's State of the Coast Report, an ongoing series of essays about important coastal issues.

Last Updated October 30, 2000

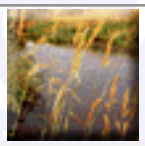
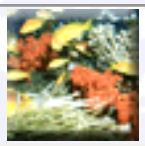
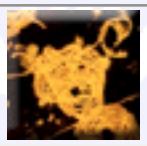
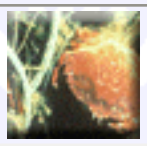
Coastal Habitats

For healthy coasts, we must preserve, conserve, and restore coastal habitats and their biodiversity.

U.S. fishery stocks have been significantly affected by overfishing, but also by the loss and deterioration of coastal habitats, especially estuaries and wetlands. Landings of estuarine dependent fisheries are down, and the shellfishing industry is operating at historically low levels. Anadromous fish populations (e.g., salmon in the Pacific Northwest) have declined significally and the genetic diversity of many populations is very low, increasing the probability of disease and extinction. Loss of habitat and the subsequent impacts on fishery resources not only mean fewer jobs for the fishermen, processors and vendors, but also declines in recreational fisheries and their associated economic activity that is vital to coastal communities and their economies.

Wetlands, estuaries, coral reefs, and other coastal habitats are essential resources for many other species as well. Migratory birds, marine mammals, sea turtles and some of the most diverse collections of species anywhere on the planet depend on healthy coastal habitats and good water quality for survival. These habitats have ecological and economic significance. Wetlands, for example, play significant roles in maintaining water quality, retarding erosion, retaining flood waters, filtering contaminants, and providing opportunities for tourism and recreation.

Coral reefs, like tropical forests, are biologically diverse and a potentially important source of new biochemical products. Coral reefs are also very fragile and thus extremely sensitive and susceptible to physical destruction and environmental stress such as water pollution, siltation, and increased water temperature. Human and natural stresses have already greatly affected the health of coral reef systems worldwide, making them one of the top stewardship priorities in the U.S., including the U.S. territories and commonwealths.

				
Restoring Coastal Habitats	**Coral Reefs**	**Populations of Harvested Fishes and Invertebrates**	**Oxygen Depletion in Coastal Waters**	**Ecological Effects of Fishing**

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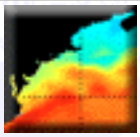
Clean Coastal Waters

For healthy coasts, we must have clean coastal waters to sustain living marine resources and ensure safe recreation, healthy seafood, and economic vitality.

Good coastal water quality is essential to the health of coastal ecosystems. The productivity and diversity of living marine resources depend on it. Without good water quality, recreational activities like swimming and sailing become health hazards, seafood becomes unsafe for human consumption, and coastal tourism is jeopardized.

To promote clean coastal waters, we must understand the problems affecting water quality and their effects on coastal ecosystems and coastal communities. Given the extent and complexity of factors affecting coastal water quality, it is important to conduct research, monitoring, and assessment activities at local, watershed, and regional scales. NOAA will help develop and implement appropriate solutions to these problems, in partnership with other regional partners, Federal agencies, coastal states, territories, local governments, and interest groups. The results of these actions will be monitored and assessed. The public and coastal decisionmakers will be informed about the problems and how best to solve them.

Chemical Contaminants in Oysters and Mussels



Monitoring the Coastal Environment

Classified Shellfish Growing Waters

Populations of Harvested Fishes and Invertebrates

Managing Oil and Chemical Spills

Oxygen Depletion in Coastal Waters

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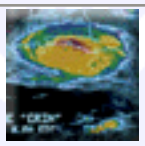
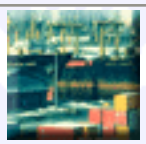
Coastal Communities

For healthy coasts, we must foster well-planned and revitalized coastal communities that sustain coastal economies, are compatible with the natural environment, minimize the risks from natural hazards, and provide access to coastal resources for the public's use and enjoyment.

A wide range of economic activities occurs along the coast, including, tourism, shipping, fishing, oil and gas production, and services for coastal residents. Every coastal community is different with some experiencing intense new development, and others seeking to revitalize derelict waterfront areas and replace declining industries with new economic opportunities. The challenge is to balance competing priorities while fostering both economic and environmental health.

One of the keys to economic and environmental health for coastal communities is careful planning for development or redevelopment. Maintaining the health of economically important resources like fisheries and clean swimming beaches is critical. It is essential that state and particularly local decisionmakers have good information about the importance of coastal resources to their economies. It is also important for them to have information on the latest land-use planning techniques and the legal issues that surround land-use planning.

In addition, coastal areas are prone to threats from storms, hurricanes, typhoons, tsunamis, and coastal erosion and flooding. Losses of life and property from coastal storms are greatly affected by how well communities have planned for such hazards. In short, the health of coastal economies and the lifesyles they afford depend on well-planned, sustainable development and healthy coastal resources.

				
Population: Distribution, Density, Growth	**Reducing the Impacts of Coastal Hazards**	**Population and Natural Hazards**	**Managing Coastal Resources**	**Preserving Waterfronts for Water Dependent Uses**

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